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## BRIEF REPORT

# Abnormal Eating Behaviour in People with a Specific Phobia of Vomiting (Emetophobia)

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### Abstract

**Objective:** The aim of this study was to explore the eating behaviour in people with a specific phobia of vomiting (SPOV), and whether those identified as restricting their food had a greater degree of psychopathology and impairment than those who do not restrict their food.

**Method:** We recruited 94 participants with SPOV. They were divided into those who reported restricting their food (SPOV-R) ( $n = 32$ ) because of fear of vomiting and those who did not restrict their food (SPOV-NR) ( $n = 62$ ).

**Results:** People with SPOV frequently have abnormal eating behaviours to reduce the perceived risk of vomiting. Only 3.7% had a body mass index (BMI) of less than 17.5, and 8.5% had a BMI of less than 18.5. The SPOV-R group had significantly higher frequency of psychopathology and abnormal eating behaviours than the SPOV-NR group.

**Discussion:** Abnormal eating behaviour, BMI, and the degree of food restriction are important factors in the assessment of SPOV. Copyright © 2011 John Wiley & Sons, Ltd and Eating Disorders Association.

### Keywords

specific phobia; emetophobia; fear of vomiting; abnormal eating behaviour

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## Introduction

A specific phobia of vomiting (SPOV) is a chronic disorder that is more prevalent among women (Lipsitz, Fyer, Paterniti, & Klein, 2001; Veale & Lambrou, 2006). It is popularly known as 'emetophobia'. Individuals with SPOV are often significantly handicapped (e.g., avoiding a desired pregnancy or a required operation with an anaesthetic). People with SPOV may be assessed and treated in eating disorder units. Manassis and Kalman (1990) reported on four adolescent girls with SPOV who were underweight and misdiagnosed as having anorexia nervosa. In all four cases, refusal to eat resulted from fear of vomiting and not from a desire to lose weight. Vandereycken (2011) recently conducted a survey of eating disorder specialists, and SPOV was reported as unknown to 29.7% of respondents; 48.5% said that they observed it in their own practice, 68.5% agreed that it was a disorder in its own right, and 61.3% thought it was worthy of more attention.

Clinical observation suggests that the behaviour of a person with SPOV is consistent with trying to eliminate all risks of vomiting (or at least the amount that is vomited or cues that remind the person of vomiting). One way to do this is to restrict one's food in one of the following patterns (Veale, 2009).

1. Restricting the amount of food eaten, and thus, in the mind of the person with SPOV, reducing the amount of food that might be vomited. Alternatively, a restricted amount is equated with feeling 'full', as eating more increases the risk of vomiting.
2. Restricting food in certain contexts (e.g., avoiding eating food cooked by someone else or in a salad bar, buffet, or restaurant) as this decreases control over food preparation and increases the perceived risk of vomiting.
3. Restricting types of food. Certain foods (e.g., seafood) might have a higher risk for vomiting. Alternatively, foods associated with past experiences of vomiting are now avoided because of a learnt association. A variation of this is restriction to a narrow range of idiosyncratic foods that are regarded as 'safe' as they are not associated with vomiting. This is akin to 'magical thinking'. An example is a woman who restricted her food to chocolate, crisps, and Coke, which had to be bought from a specific supermarket location.

There have been no systematic studies of eating behaviour in people with SPOV. The aim of our study was therefore to understand more about the frequency and pattern of eating behaviour in people with SPOV. It was hypothesized that food restriction in SPOV is associated with an increased probability

of other symptoms and a greater degree of psychopathology and impairment compared with those who do not restrict their food.

## Methods

Participants were recruited either from an anxiety disorder clinic setting ( $n=24$ ) or posting on Internet support groups for SPOV (Gut Reaction, International Emetophobia Society, and Anxiety UK) ( $n=70$ ). A research assistant contacted participants from the support groups in order to conduct an interview over the telephone to confirm the diagnosis of SPOV. All 70 participants recruited over the internet were contacted by telephone at least three times, but 24 of them did not answer. The inclusion criterion for participation in the research was to have a diagnosis of SPOV as their main problem. The exclusion criteria were having an eating disorder or having an increased risk of vomiting (from pregnancy, taking drugs or prescribed medication, or having a medical problem).

Participants in the clinical setting completed the questionnaires on paper. Participants recruited from the internet were sent the questionnaires either by post or completed them online, according to their preference. SelectSurveyASP™ version 8.1.1 was used to create a web-based version of the questionnaires. The format and structure of the questions were identical to the paper version. Some of the programme features, such as request for answers to avoid missing answers, were utilized, if appropriate. There were no significant differences on any of our measures between those who were recruited in a clinic setting and those from an Internet support group; therefore, the two groups were combined. All participants completed the following:

- 1 Psychiatric Diagnostic Screening Questionnaire (PDSQ) (Zimmerman & Mattia, 2001). The screening questionnaire was used before a structured diagnostic interview (SCID) for DSM-IV to confirm a diagnosis of a specific phobia that was focused on vomiting and to determine any co-morbidity.
- 2 Fear of vomiting questionnaire. This is a self-report questionnaire that provides an assessment of beliefs, safety-seeking and avoidance behaviours, and degree of handicap associated with SPOV. The degree of avoidance of specific foods and eating situations was measured on a scale between 0 ('never avoid') to 10 ('always avoid'). The frequency of abnormal eating behaviours was rated on a four-point scale, where 0 was 'never', 1 'sometimes', 2 'often', and 3 'always'.
- 3 Specific Phobia of Vomiting Inventory (SPOVI) (Veale et al., submitted for publication, Institute of Psychiatry, London). The SPOVI is a self-report scale that measures the putative cognitive processes and behaviours that maintain symptoms of SPOV. It consists of 15 items each scored on a Likert scale for frequency from 0 (not at all) to 4 (all the time). The total scores range from 0 to 60, with a higher score reflecting greater severity. The scale has good psychometric properties, including convergent validity, high internal consistency (Cronbach's  $\alpha$  in the current sample, 0.91), test-retest reliability, and sensitivity to change during treatment.
- 4 Disgust Scale Revised (DS-R) (Olatunji et al., 2007; van Overveld, de Jong, Peters, & Schouten, 2011). The DS-R is a self-report scale used to measure individual differences in sensitivity to disgust. There are 25 items rated on a five-point scale (from 0 to 4). The total score ranges from 0 to 100, with higher scores reflecting greater sensitivity to disgust.
- 5 Obsessive Compulsive Inventory (OCI) (Foa, Kozak, Salkovskis, Coles, & Amir, 1998). The OCI is a 42-item self-report measure of obsessive compulsive symptoms. Participants rate each item for distress on a five-point Likert scale. The range for the total score is 0 to 168. The scale has shown adequate internal consistency. Cronbach's  $\alpha$  in the current sample is 0.95.
- 6 Health Anxiety Inventory (HAI, short version) (Salkovskis, Rimes, Warwick, & Clark, 2002). The HAI is a self-rated measure of health anxiety that differentiates people suffering from health anxiety from those who have actual physical illness but who are not excessively concerned about their health. The HAI (14 items) is scored on a four-point Likert scale from 0 to 3. The total score ranges from 0 to 42. Scores of 18 or higher reliably identified people fulfilling the DSM-IV diagnostic criteria for hypochondriasis. Cronbach's  $\alpha$  in the current sample is 0.91.
- 7 Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer, & Williams, 2001). The PHQ-9 is a widely used self-report measure for depression. It scores each of the nine DSM-IV criteria as '0' (not at all) to '3' (nearly every day). PHQ-9 total score ranges from 0 to 27. Scores of 5, 10, 15, and 20 represent cut-off points for 'mild', 'moderate', 'moderately severe', and 'severe' depression, respectively. Cronbach's  $\alpha$  in the current sample is 0.92.
- 8 Generalized Anxiety Disorder Assessment (GAD-7) (Spitzer, Kroenke, Williams, & Löwe, 2006). The GAD-7 is a screening and severity measure for symptoms of generalized anxiety. It has moderately good operating characteristics for common anxiety disorders. Total scores range from 0 to 21. Scores of 0–5 represent mild anxiety; 6–10, moderate anxiety; 11–15, moderately severe anxiety; and 15–21, severe anxiety. Cronbach's  $\alpha$  in the current sample is 0.92.
- 9 Work and Social Adjustment Scale (WSAS) (Mundt, Marks, Shear, & Greist, 2002). The WSAS was adapted to SPOV. There are five items: 'To what extent does your fear of vomiting currently have an effect on (a) your relationship with a partner or dating; (b) your ability to work or study; (c) your social life; (d) your leisure activities; and (e) your home management'. Items were scored between 0 ('Not at all') and 8 ('Extremely'), and the range was 0 to 40. Cronbach's  $\alpha$  in the current sample is 0.69.

In the analysis, the SPOV group was divided into those who reported restricting their food because of fear of vomiting as either 'never' or 'sometimes' (SPOV-NR) ( $n=62$ ), and those who reported restricting their food because of fear of vomiting 'often' or 'always' (SPOV-R) ( $n=32$ ). The research was reviewed and approved by the Joint South London and Maudsley and the Institute of Psychiatry NHS Research Ethics Committee.

## Results

We recruited 94 participants with SPOV (women, 88; men, 6). Their mean body mass index (BMI) was 22.8 (Table 1). We

**Table 1** Age, BMI, psychopathology, and avoidance behaviour in the total SPOV, SPOV-R, and SPOV-NR groups

	Total SPOV Mean (SD)	SPOV-R Mean (SD)	SPOV-NR Mean (SD)	t-test/ $\chi^2$ test
Age (N = 94)	32.6 (12.1)	32.5 (11.3)	32.7 (12.6)	0.3
BMI (N = 82)	22.8 (4.2)	20.6 (3.3)	23.8 (4.2)	3.4**
<18.5 (%)	8.5	23.1	1.8	7.7**
<17.5 (%)	3.7	11.5	0	3.8*
<i>Psychopathology</i>				
SPOVI (N = 94)	32.9 (13.9)	40.09 (12.4)	29.2 (13.2)	3.9**
DS-R (N = 88)	57.6 (14.4)	61.0 (15.4)	55.8 (13.7)	1.6
OCI (N = 81)	33.5 (5.8)	41.9 (28.8)	29.6 (23.5)	2.0*
HAI (N = 75)	19.8 (8.1)	22.3 (8.0)	18.4 (7.9)	2.0*
PHQ-9 (N = 84)	9.9 (7.9)	11.7 (7.6)	8.9 (7.9)	1.6
GAD-7 (N = 88)	9.3 (6.5)	11.7 (5.7)	7.9 (6.6)	2.7**
WSAS (N = 85)	17.3 (8.3)	21.2 (8.1)	15.4 (7.8)	3.2**
Effect on relationships (N = 89)	4.0 (2.4)	5.0 (2.1)	3.5 (2.4)	2.4*
Effect on work (N = 90)	3.7 (2.5)	4.7 (2.5)	3.2 (2.3)	2.7**
Effect on social life (N = 91)	5.0 (2.1)	5.7 (1.9)	4.6 (2.2)	2.2*
Effect on leisure activities (N = 91)	1.6 (2.1)	2.4 (2.5)	1.3 (1.7)	2.6*
Effect on home management (N = 91)	2.6 (2.7)	3.8 (2.6)	2.0 (2.6)	3.2**
Days experienced nausea during the past week (N = 93)	3.8 (2.5)	4.5 (2.3)	3.3 (2.6)	2.2*
<i>Avoidance behaviour</i>				
Eating at restaurants (N = 91)	3.8 (3.2)	5.4 (3.1)	2.9 (2.9)	3.8**
Eating at salad bars or buffets (N = 91)	5.5 (4.0)	7.1 (4.2)	4.7 (3.7)	2.9**
Eating food not prepared by self (N = 91)	4.1 (3.0)	5.2 (3.4)	3.6 (2.8)	2.2*

SPOVI, Specific Phobia of Vomiting Inventory; DS-R, Disgust Scale Revised; OCI, Obsessive Compulsive Inventory; HAI, Health Anxiety Inventory; PHQ-9, Patient Health Questionnaire (for depression); GAD-7, Generalized Anxiety Disorder Assessment; WSAS, Work and Social Adjustment Scale.

\* $p < .05$ .

\*\* $p < .01$ .

were able to interview 70 out of 94 participants (75%). *T*-tests were conducted on all the measures to examine potential differences between participants who were interviewed ( $N = 70$ ) and those who were not ( $N = 24$ ). There were no significant differences between the two groups on any of the measures.  $\chi^2$  tests were conducted to examine whether the 24 participants who were not interviewed were evenly distributed over the SPOV-R and SPOV-NR groups. There were no significant differences in the distribution of the 24 participants not interviewed across the two groups. All patients who were interviewed had their diagnosis of SPOV confirmed. Of those interviewed, 64.3% had no comorbid diagnoses, 21.4% had one comorbid diagnosis in addition to SPOV, and 14.3% had two or more comorbid diagnoses. The most common comorbidities consisted of depressive episode ( $n = 8$ , 11.4%), generalized anxiety disorder ( $n = 7$ , 10.0%), obsessive compulsive disorder ( $n = 6$ , 8.6%), somatisation disorder ( $n = 5$ , 7.1%), panic disorder ( $n = 4$ , 5.7%), social phobia ( $n = 4$ ,

5.7%), agoraphobia ( $n = 2$ , 2.9%), health anxiety ( $n = 1$ , 1.4%), and other specific phobia ( $n = 1$ , 1.4%). None of the participants had a comorbid diagnosis of anorexia nervosa, bulimia nervosa, or binge-eating disorder.

The results of the analyses comparing the SPOV-NR and SPOV-R are shown in Tables 1 and 2. There were no significant differences in age between the groups, but the SPOV-R group had significantly lower BMI than the SPOV-NR group (Table 1). There were 3 patients with a BMI <17.5 (one of the criterion for anorexia nervosa), which is 3.7% of the whole SPOV sample. Moreover, all these patients belonged to the SPOV-R group.

The proportion of participants with a BMI <18.5 was 23.1% in the SPOV-R group and 1.8% in the SPOV-NR group. Differences between the two groups in the proportion of underweight people were statistically significant. The SPOV-R group reported symptoms of nausea significantly more often than the SPOV-NR group (Table 1). The SPOV-R group had significantly higher scores on the SPOVI, OCI, HAI, GAD-7, and WSAS questionnaires, compared with the SPOV-NR group. This reflects greater severity of anxiety symptoms and impairment. Both groups scored in the clinical range of the HAI, indicating elevated levels of health anxiety. In comparison with the SPOV-NR group, the SPOV-R group reported greater interference in their life (in particular, in relationships, work, social life, leisure activities, and home management) due to their SPOV. There were no significant differences between the two groups in the severity of disgust sensitivity or depression.

**Table 2** Abnormal eating behaviours in the total SPOV, SPOV-R, and SPOV-NR groups

	Total SPOV (%)	SPOV-R (%)	SPOV-NR (%)	$\chi^2$ test
<i>Abnormal eating behaviour</i>				
Excessively smell or check sell by dates and freshness of food (N = 93)	82.8	93.5	77.4	2.7
Cook food for longer than others consider necessary (N = 92)	62.4	80.6	53.2	5.5*
Rituals or counting in an effort to stop self from vomiting (N = 92)	28.3	33.3	5.8	0.3
<i>Foods avoided (N = 86)</i>				
Seafood	81.4	87.1	78.2	0.5
Meat	79.1	83.9	76.4	0.3
Foreign meals	27.9	48.4	16.4	8.6**
Fruits and vegetables	27.9	32.3	25.5	0.2
Eggs	26.7	16.1	32.2	2.0
Carbohydrate foods	19.8	32.3	12.7	3.6
Dairy products	17.4	29.0	10.9	3.4
Fried fast foods	10.5	9.7	10.9	0.0
Precooked foods	9.3	19.4	3.6	4.1*

\* $p < .05$ .

\*\* $p < .01$ .

## Avoidance of eating situations and foods

The SPOV-R group had significantly higher avoidance rates for eating at restaurants, salad bars or buffets, or food not prepared by themselves (Table 1), compared with the SPOV-NR group. The SPOV-R group was also more likely to avoid foreign meals and precooked foods than the SPOV-NR group; statistical significance was not reached for the other food groups (Table 2).

## Abnormal eating behaviours

Table 2 provides details of the frequency of abnormal behaviours related to preparing or eating foods that were done 'often' or 'always'. The SPOV group as a whole reported engaging in behaviours aimed at reducing the risk of vomiting, in particular, excessively smelling or checking sell by dates or freshness of food (82.8%) and cooking food for longer than others consider necessary (62.4%). However, a lower percentage was found to be using rituals to prevent themselves from vomiting (28.3%). The SPOV-R group was significantly more likely to report cooking food for a longer period than others consider necessary, compared with the SPOV-NR group; the difference for the other behaviours was not significant.

## Discussion

This study included a relatively large sample of people with SPOV who had either sought help at our clinic or were part of Internet support groups. The results showed that restricting food 'often' or 'always' and abnormal eating behaviour occur in about one third of people with SPOV. Across the whole SPOV group, 8.5% were underweight, with a BMI of less than 18.5. This prevalence is higher than the estimated 1.6% underweight adults found in a normal adult population (Fryar & Ogden, 2010). When SPOV is accompanied by food restriction, then there is an associated significant increase in the severity of the symptoms of SPOV: obsessive compulsive disorder, health anxiety, general anxiety, and overall impairment. The relationship between food restriction and weight loss with increased severity of SPOV symptoms is likely to be bidirectional, with one aggravating the other. For example, food restriction was associated with increased symptoms of nausea, which may be misinterpreted as evidence of increased risk of vomiting and further restriction of food. People with SPOV have a heightened internal locus of control (Davidson, Boyle, & Lauchlan, 2008), and their main goal is to reduce the risk of vomiting. Dietary restriction and weight loss are likely to be reinforcing—for example, leading to a feeling of being in

control (positive reinforcement). Significant weight loss may lead to emotional numbness that may reduce anxiety (negative reinforcement).

One possible limitation of the study is that we were only able to confirm the diagnosis of SPOV by an interview in 70 out of 94 participants. Nevertheless, there was no false-positive diagnosis of SPOV or of an eating disorder in any of the participants who were interviewed. Also, there were no differences on any of the measures between participants who were interviewed and those who were not. Another limitation of the study was that the SPOV-R and SPOV-NR groups were divided into two groups based on one single item ('Do you restrict the amount of food you eat either in the hope of preventing yourself from vomiting or controlling the amount that you vomit?'). No specification was made regarding the meaning of 'restricting food'; therefore, this could be related to the amount or type of foods eaten, as well as the context in which food was cooked. Nevertheless, it was made clear that the purpose of 'restricting food' was to avoid or control vomiting (as opposed to body or weight concerns). Lastly, all the data on eating behaviour and weight were collected by questionnaire rather than interview. Self-report scales may be associated with a socially desirable response (van de Mortel, 2008), which in turn may lead to an underestimation of the severity or frequency of the symptoms. Future studies should use structured clinical interviews.

Loss of weight may theoretically be a factor in developing anorexia nervosa. However, none of our participants fulfilled the diagnostic criteria of anorexia nervosa. A diagnosis of SPOV would, by definition, be incompatible with self-induced vomiting but could still be compatible with other types of purging. Our findings support the recommendation that assessment in SPOV should include the BMI, the degree to which a person restricts his or her food, and abnormal eating behaviours. The correct diagnosis of SPOV is important, as patients are unlikely to identify with a treatment model for an eating disorder. If patients need admission for weight loss, they may feel misunderstood, and they may feel that they do not belong to an eating disorders unit, as being underweight or malnourished is not the intention but is an unintended consequence of the more important goal of not vomiting. Restriction of food and loss of weight may be associated with reduced cognitive flexibility, thus making cognitive behaviour therapy more difficult (Tchanturia et al., 2004). Restoration of normal patterns of eating (and sometimes weight gain) should still be an early target in therapy, but by focusing on the fear of vomiting and past adverse experiences of vomiting (Veale, 2009).

## REFERENCES

- Davidson, A., Boyle, C., & Lauchlan, F. (2008). Scared to lose control? General and health locus of control in females with a phobia of vomiting. *Journal of Clinical Psychology*, 64, 30–39.
- Foa, E. B., Kozak, M. J., Salkovskis, P. M., Coles, M. E., & Amir, N. (1998). The validation of a new obsessive-compulsive disorder scale: The Obsessive Compulsive Inventory. *Psychological Assessment*, 10, 206–214.
- Fryar, C. D., & Ogden, C. L. (2010). *Prevalence of underweight among adults aged 20 years and over: United States, 2007–2008*. National Centre for Health Statistics.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16, 606–613.
- Lipsitz, J. D., Fyer, A. J., Paterniti, A., & Klein, D. F. (2001). Emetophobia: Preliminary results of an internet survey. *Depression and Anxiety*, 14, 149–152.
- Manassis, K., & Kalman, E. (1990). Anorexia resulting from fear of vomiting in four adolescent girls. *Canadian Journal of Psychiatry*, 35, 548–550.
- van de Mortel, T. (2008). Faking it: social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, 25, 40–48.
- Mundt, J. C., Marks, I. M., Shear, M. K., & Greist, J. H. (2002). The Work and Social Adjustment Scale: A simple measure of impairment in functioning. *The British Journal of Psychiatry*, 180, 461–464.



- Olatunji, B. O., Williams, N. L., Tolin, D. F., Abramowitz, J. S., Sawchuk, C. N., Lohr, J. M., et al. (2007). The Disgust Scale: Item analysis, factor structure, and suggestions for refinement. *Psychological Assessment*, 19, 281–297.
- van Overveld, M., de Jong, P. J., Peters, M. L., & Schouten, E. (2011). The Disgust Scale-R: A valid and reliable index to investigate separate disgust domains? *Personality and Individual Differences*, 51, 325–330.
- Salkovskis, P. M., Rimes, K. A., Warwick, H. M. C., & Clark, D. M. (2002). The Health Anxiety Inventory: Development and validation of scales for the measurement of health anxiety and hypochondriasis. *Psychological Medicine*, 32, 843–853.
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine* 166, 1092–1097.
- Tchanturia, K., Anderluh, M. B., Morris, R. G., Rabe-Hesketh, S., Collier, D. A., Sanchez, P., et al. (2004). Cognitive flexibility in anorexia nervosa and bulimia nervosa. *Journal of the International Neuropsychological Society*, 10, 513–520.
- Vandereycken, W. (2011). Media hype, diagnostic fad or genuine disorder? Professionals' opinions about night eating syndrome, orthorexia, muscle dysmorphia, and emetophobia. *Eating Disorders*, 19, 145–155.
- Veale, D. (2009). Cognitive behaviour therapy for a specific phobia of vomiting. *The Cognitive Behaviour Therapist*, 2, 272–288.
- Veale, D., & Lambrou, C. (2006). The psychopathology of vomit phobia. *Behavioural and Cognitive Psychotherapy*, 34, 139–150.
- Zimmerman, M., & Mattia, J. I. (2001). A self-report scale to help make psychiatric diagnoses: the Psychiatric Diagnostic Screening Questionnaire. *Archives of General Psychiatry*, 58, 781–794.